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? WHY THE WEATHER ?

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CLOUDS FORMED BY MOUNTAINS

When a stream of air is forced to ascend in passing over a mountain some of the water vapor it contains is often condensed as a result of expansion and "dynamic cooling," and a cloud cap is seen over the summit. In local weather lore such caps are generally regarded as portending rain. A century or more ago these clouds attached to mountains were known as "parasitic" clouds and there was much curious speculation concerning their origin. At a later period Ruskin devoted a good deal of unprofitable discussion to them in his "Modern Painters."

Occasionally a "cloud banner" streams far to the leeward of a mountain peak. Its formation is not due entirely to the forced ascent of the air but also in part to the reduction of atmospheric pressure in the immediate lee of the peak and the cooling of the air by contact with the mountain. In some cases these banner-like clouds consist partly or wholly of snow blown from the mountaintops. John Muir has described "snow banners" of this sort, as seen over California mountains.

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